



Program  
on  
Improved  
Seismic  
Safety  
Provisions

# **SEISMIC CONSIDERATIONS FOR COMMUNITIES AT RISK**

The **Building Seismic Safety Council (BSSC)** was established in 1979 under the auspices of the National Institute of Building Sciences as an entirely new type of instrument for dealing with the complex regulatory, technical, social, and economic issues involved in developing and promulgating building earthquake hazard mitigation regulatory provisions that are national in scope. By bringing together in the BSSC all of the needed expertise and all relevant public and private interests, it was believed that issues related to the seismic safety of the built environment could be resolved and jurisdictional problems overcome through authoritative guidance and assistance backed by a broad consensus.

The BSSC is an independent, voluntary membership body representing a wide variety of building community interests. Its fundamental purpose is to enhance public safety by providing a national forum that fosters improved seismic safety provisions for use by the building community in the planning, design, construction, regulation, and utilization of buildings.

To fulfill its purpose, the BSSC: (1) promotes the development of seismic safety provisions suitable for use throughout the United States; (2) recommends, encourages, and promotes the adoption of appropriate seismic safety provisions in voluntary standards and model codes; (3) assesses progress in the implementation of such provisions by federal, state, and local regulatory and construction agencies; (4) identifies opportunities for improving seismic safety regulations and practices and encourages public and private organizations to effect such improvements; (5) promotes the development of training and educational courses and materials for use by design professionals, builders, building regulatory officials, elected officials, industry representatives, other members of the building community, and the public; (6) advises government bodies on their programs of research, development, and implementation; and (7) periodically reviews and evaluates research findings, practices, and experience and makes recommendations for incorporation into seismic design practices.

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**BSSC Staff** James R. Smith, Executive Director; O. Allen Israelsen, Project Manager; Claret M. Heider, Technical Writer-Editor; Thomas Hollenbach, Director, Technology Transfer; Karen E. Smith, Administrative Assistant

BSSC Program on Improved Seismic Safety Provisions

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**Developed by the  
Building Seismic Safety Council  
for the  
Federal Emergency Management Agency**

**BUILDING SEISMIC SAFETY COUNCIL  
Washington, D.C.  
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NOTICE: Any opinions, findings, conclusions, or recommendations expressed in this publication do not necessarily reflect the views of the Federal Emergency Management Agency. Additionally, neither FEMA nor any of its employees make any warranty, expressed or implied, nor assume any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, product, or process included in this publication.

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Building Seismic Safety Council reports include the documents listed below; unless otherwise noted, single copies are available at no charge from the Council:

*The NEHRP (National Earthquake Hazards Reduction Program) Recommended Provisions for Seismic Regulations for New Buildings*, 1994 Edition, 2 volumes and maps (FEMA Publications 222A and 223A).

*The NEHRP (National Earthquake Hazards Reduction Program) Recommended Provisions for the Development of Seismic Regulations for New Buildings*, 1991 Edition, 2 volumes and maps (FEMA Publications 222 and 223).

*Guide to Application of the 1991 Edition of the NEHRP Recommended Provisions in Earthquake Resistant Building Design*, Revised Edition, 1995 (FEMA Publication 140).

*A Nontechnical Explanation of the 1994 NEHRP Recommended Provisions*, Revised Edition, 1995 (FEMA Publication 99).

*Seismic Considerations for Communities at Risk*, Revised Edition, 1995 (FEMA Publication 83).

*Seismic Considerations: Apartment Buildings*, Revised Edition, 1995 (FEMA Publication 152).

*Seismic Considerations: Elementary and Secondary Schools*, Revised Edition, 1990 (FEMA Publication 149).

*Seismic Considerations: Health Care Facilities*, Revised Edition, 1990 (FEMA Publication 150).

*Seismic Considerations: Hotels and Motels*, Revised Edition, 1990 (FEMA Publication 151).

*Seismic Considerations: Office Buildings*, Revised Edition, 1995 (FEMA Publication 153).

*Societal Implications: Selected Readings*, 1985 (FEMA Publication 84).

*NEHRP Handbook of Techniques for the Seismic Rehabilitation of Existing Buildings*, 1992 (FEMA Publication 172).

*NEHRP Handbook for the Seismic Evaluation of Existing Buildings*, 1992 (FEMA Publication 178).

*An Action Plan for Reducing Earthquake Hazards of Existing Buildings*, 1985 (FEMA Publication 90).

*Abatement of Seismic Hazards to Lifelines: An Action Plan*, 1987 (FEMA Publication 142).

*Abatement of Seismic Hazards to Lifelines: Proceedings of a Workshop on Development of An Action Plan*, 6 volumes, 1987.

*Strategies and Approaches for Implementing a Comprehensive Program to Mitigate the Risk to Lifelines from Earthquakes and Other Natural Hazards*, 1989 (available from the National Institute of Building Sciences for \$11).

*An Integrated Approach to Natural Hazard Risk Mitigation*, 1995 (FEMA Publication 261).

For further information concerning any of these documents or the activities of the BSSC, contact the Executive Director, Building Seismic Safety Council, 1201 L St., N.W., Suite 400, Washington, D.C. 20005.

# FOREWORD

The Federal Emergency Management Agency (FEMA) is pleased to have the opportunity to sponsor the Program on Improved Seismic Safety Provisions being conducted by the Building Seismic Safety Council (BSSC). The materials produced by this program represent the tangible results of a significant effort, under way for more than a decade, to lessen adverse seismic effects on buildings throughout the United States.

This community handbook is a companion publication to the 1994 Edition of the *NEHRP (National Earthquake Hazards Reduction Program) Recommended Provisions for Seismic Regulations for New Buildings*, and it is one of a series of reports produced to increase awareness of seismic risk and to disseminate information on up-to-date seismic design and construction practices. It is designed to provide interested individuals across the nation with information that will assist them in assessing the seismic risk to their buildings and their community and in determining what might be done to mitigate that risk – whether on an individual basis or through community building regulatory action.

This community handbook reflects very generous contributions of time and expertise on the part of many individuals. FEMA compliments the participants in the BSSC program and gratefully acknowledges their efforts.

*Federal Emergency Management Agency*

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